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AUTHOR Grayson, J. Paul
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ABSTRACT

A study surveyed 1,091 students admitted to Atkinson College for Fall 1993 to determine the outcomes new adult students expected from their university experience and the degree to which desired outcomes varied by gender and visible minority status. Analysis of responses showed the following: knowledge acquisition and career advancement were the most important outcomes for newly admitted students; civic improvement and improvements in family relations were regarded as outcomes of intermediate importance; and social involvement and family approval were regarded as relatively unimportant. The importance of particular outcomes varied with the general social characteristics of students; however, differences were not large. Although the importance of certain outcomes varied by gender and/or visible minority group status, these variables only explained a small amount of total variance. The importance of many outcomes also varied by student characteristics such as length of time in the country, marital status, and having children in the home. In essence, although gender and visible minority group status differences existed with regard to the importance of the desired outcomes of the university experience, differences were small. (The paper contains 7 data tables and 16 references.) (YLB)

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GENDER AND MINORITY GROUP DIFFERENCES IN DESIRED OUTCOMES OF ADULT POST-SECONDARY EDUCATION: THE STUDENT PERSPECTIVE

J. PAUL GRAYSON

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Gender and Minority Group Differences in Desired Outcomes of Adult Post-Secondary Education: The Student Perspective

J. Paul Grayson
Institute for Social Research

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Institute for Social Research
York University
4700 Keele Street
North York, Ontario, Canada M3J 1P3

Telephone: (416) 736-5061; Fax (416) 736-5749

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The following is a working paper.

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Summary

An increasing amount of concern is being expressed over university outcomes and the extent to which the needs of females and visible minority students are being met by various programs offered in universities. In this study 1,091 students admitted to Atkinson College for the Fall of 1993 were surveyed to determine, among other things, the outcomes new students expect from their university experience and the degree to which desired outcomes vary by gender and visible minority status.

The analysis showed that knowledge acquisition and career advancement were the most important outcomes for newly admitted students. Civic improvement and improvements in family relations were regarded as outcomes of intermediate importance. Social involvement and family approval were regarded as relatively unimportant.

It is also evident that the importance of particular outcomes varies with the general social characteristics of students; however, differences are not large. Moreover, while the importance of certain outcomes varies by gender and/or visible minority group status, these variables only explain a small amount of total variance. In essence, while gender and visible minority group status differences exist with regard to the importance of the desired outcomes of the university experience, differences are small.

Whether or not the desired outcomes of various students will be contributed to by the university experience will be determined in a follow-up study. Once such information is available, it will be possible to discuss any needed changes to make the university experience more consistent with students' desired outcomes.

Introduction

In recent years, government, business, professors, and university administrators have become increasingly concerned with the outcomes of the university experience. What is the impact of the university on the student? The implicit answer given by Macleans magazine in its annual ranking of Canadian universities is that it depends on things like students' average university entering grade, the number of out of province students, median class size, number of classes taught by tenured faculty, the number of humanities and medical/science grants, operating budget, and amount of alumni support. Unfortunately, Macleans' ranking, and others like it, do not describe the presumed impact of the factors on which their assessment is based. In the United States, where the impact of similar factors have been examined, they have been found to be of questionable validity. As Pascarella and Terenzini, in a massive review of studies of college/university outcomes summarize, "many current notions of institutional quality may be misleading, particularly those based on resources (library holdings, endowment, faculty degrees, and so on), simpleminded outcomes (such as the quality of an institution's graduates unadjusted for their precollege characteristics), or reputation" (1991:637).

Instead of relying on what may be superficial indicators of institutional excellence, Pascarella and Terenzini, and others, such as Astin (1991), Gilbert et al (1989), and Evers and Gilbert (1991), emphasize the necessity of studying university outcomes. They attempt to measure the net effect of university on students after controls have been introduced for pre-entry characteristics. Asking the question in this fashion allows consideration of the fact that, for example, certain institutions may graduate students who later have successful careers not because of the university's impact, but because the university attracts students from high socio-economic backgrounds who participate in networks useful to career success. Other institutions that might rank low in terms of resources may nonetheless have considerable impact on students from disadvantaged families even though graduates may not attain the career heights of degree holders from more prestigious institutions.

While researchers studying university outcomes do not all focus on the same issues, there is a certain degree of overlap. For example, in their synthesis, Pascarella and Terenzini focus on: the development of verbal, quantitative, and subject matter competence; cognitive skills; psychosocial changes; attitudes and values; moral development; educational attainment; career choice and development; economic benefits; and quality of life after college/university. In a multi-institutional analysis involving thousands of students Astin (1993) focuses on personality and self-concept; attitudes, values, and beliefs; patterns of behaviour; academic and cognitive development; career development; and satisfaction with the college environment. Evers and Gilbert look at: thinking and

reasoning skills; problem solving skills; planning and organizing skills; time management skills; the ability to conceptualize; learning skills; and quantitative mathematical and technical skills.

It is fair to say that when research has been conducted on college/university outcomes, the primary focus has been on young adult full-time students, many of whom live in residence. This would not be a problem were it not for the fact that in both Canada and the United States increasing numbers of college/university students, in terms of age, race, and residential location, do not fit the profile of students on which much of the existing research is based. Indeed, Pascarella and Terenzini argue that: "Specifying the effects of college for the vast numbers of nontraditional students who now populate American post-secondary education may be the single most important area of research on college impacts in the next decade" (1991:632). This comment is equally applicable to Canada.

Within the framework of the study of university outcomes, when pursuing the research priority suggested by Pascarella and Terenzini, it is necessary to be precise with respect to the desired university outcomes to be considered. While this may seem self-evident, not all observers of the educational system necessarily agree on desired outcomes. For example, spokespersons for business may have a different agenda from that of universities. More importantly, students may have a different set of priorities than their professors (Gilbert and Auger, 1988; Grayson, 1993).

Consistent with these possibilities, the remainder of this article will focus on the desired outcomes of *adult* students admitted to Atkinson College in the Fall of 1993. Put differently, attention will focus on what entering students hope to get out of their education. Once such aspirations are identified, it will be possible to determine the degree to which the various activities offered by the college result in the desired outcomes, and identify any changes that might be needed to foster congruence between students' desired outcomes and institutional experiences.

Atkinson College, a part of York University located in Toronto, has a mandate to meet the needs of students who take evening courses. Given the multi-racial and multi-ethnic composition of Metropolitan Toronto, it is not surprising that Atkinson students come from diverse backgrounds. As a result, this study will be particularly concerned with any differences in desired outcomes that can be related to the visible minority status or gender of students. A finding that desired outcomes vary by either may have important implications for college policies and practices.

The Outcomes of Adult Education

While it is difficult in the literature on post-secondary adult education to identify studies that focus on outcomes and the degree to which various institutional arrangements contribute to their realization (see, for example, Houle, 1992), the research tradition in adult education on motivation is directly relevant to the current undertaking. For example, Houle (1961) identified three basic motivations for adult learning. 'Goal oriented' learners are motivated by the desire to realize a specific objective, such as gaining the credentials for getting a specific job. From the perspective of this article, the desired outcome would be actually *getting* the credentials for the job in question. 'Activity oriented' learners are motivated by the desire to engage in meaningful interactions with others, for example, to avoid a boring home environment. The desired outcome for this type of learner would be the actual *development* of meaningful interactions based on, or derived from, the learning situation. Finally, 'learning oriented' learners are individuals whose motivation for learning is to learn for the sake of learning, or intellectual development. A desired outcome for such individuals would be *learning* or intellectual development.

Motivations are not the same as desired outcomes. For example, an individual may continue to be motivated to pursue studies in order to gain credentials for a particular job. In the final analysis, however, the learning process may not lead to the acquisition of the required credentials and/or the particular job. Similarly, a student may be motivated to pursue studies as a way of meeting interesting people. This does not mean that the desired interactions, or outcome, will develop. Similarly, although the desire for knowledge may motivate an individual to enrol in post-secondary education, this does not mean that participation in a course of studies will have the desired outcome. Among other things, whether or not the original motivation will result in the desired outcome is a function of the opportunities available, and the experiences had, in the formal and informal college/university environment. Moreover, some colleges/universities more than others may be able to provide the individual with the desired opportunities and/or experiences. For the policy maker one objective is to make available within the college/university environment opportunities and/or experiences such that original and sustained motivations can result in desired outcomes.

As pointed out by Courtney (1992:76), a number of researchers have elaborated on Houle's original formulation of learning motivation (Boshier, 1980; Dickinson and Clark, 1975; Boshier, 1985; Clayton and Smith, 1987). These studies result in three major conclusions. First, most learning typologies identified by subsequent researchers are comparable to Houle's original three. Second, researchers have discovered more than Houle's original three categories. Third, the discovery and identification of categories is a function of the scales and

Table 1: Please indicate how important each of the following factors was in your decision to apply to Atkinson.

	1 Not Important	2	3	4	5 Very Important	Total
To enhance interpersonal skills						
Count	156	107	243	230	256	992
%	16%	11%	24%	23%	26%	100%
Because friends were going on to post secondary education.						
Count	583	77	55	26	12	753
%	77%	10%	7%	3%	2%	100%
To increase chances of finding a well paying job.						
Count	65	42	145	267	467	1006
%	6%	4%	14%	27%	46%	100%
For intellectual development.						
Count	21	15	105	302	618	1062
%	2%	1%	10%	28%	58%	100%
Because it is important to my parents.						
Count	475	105	127	68	42	816
%	59%	13%	16%	8%	5%	100%
Becuause it is important to my spouse.						
Count	367	65	68	27	22	579
%	63%	11%	12%	5%	4%	100%
To prepare for a professional programme.						
Count	90	42	157	192	470	951
%	9%	4%	17%	20%	49%	100%
For the social life.						
Count	500	160	145	90	29	924
%	54%	18%	17%	10%	3%	100%
To become better informed.						
Count	50	55	105	326	382	1038
%	5%	5%	10%	31%	37%	100%
To understand community problems better.						
Count	181	141	261	194	233	960
%	19%	14%	27%	20%	24%	100%
To become a better citizen.						
Count	247	135	222	247	133	944
%	26%	15%	24%	26%	14%	100%
To meet new people.						
Count	244	197	324	150	67	982
%	25%	20%	33%	15%	7%	100%
To feel a sense of belonging						
Count	420	167	205	97	47	936
%	45%	18%	22%	10%	5%	100%
To get away from routine personal problems.						
Count	548	128	102	48	54	937
%	59%	14%	11%	5%	6%	100%
To satisfy my employer.						
Count	474	79	89	51	45	740
%	64%	11%	12%	7%	6%	100%
To prove to myself that I could do it.						
Count	248	90	210	229	351	1018
%	24%	9%	21%	22%	34%	100%
To become a better parent.						
Count	245	49	105	70	78	547
%	45%	9%	19%	13%	14%	100%
To become a better spouse.						
Count	289	71	102	53	56	571
%	51%	12%	18%	9%	10%	100%
To become a happier person.						
Count	154	88	243	221	254	960
%	16%	9%	25%	23%	26%	100%
To give myself the credentials/qualifications for beginning an occupation or career.						
Count	42	24	89	188	588	931
%	5%	3%	9%	20%	63%	100%
To give myself the credentials/qualifications for moving out of my present occupation and into a new occupation/career.						
Count	91	54	109	161	437	854
%	11%	6%	13%	19%	51%	100%
To give myself the credentials/qualifications for advancement in my present occupation or career.						
Count	102	46	105	137	409	818
%	12%	6%	13%	17%	50%	100%

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theory employed by the researcher. As will be seen later, the current study, that focuses on desired outcomes rather than motivations, is nonetheless consistent with these three conclusions.

The Nature of the Sample

The sample of 1,091 individuals on which the current study is based is part of a larger inquiry that will track students entering Atkinson College in the Fall of 1993. In the Summer of 1993, 2,388 new students were admitted to the College in six waves. Because a seventh wave was admitted just prior to the beginning of classes, and because the study design required that interviews be completed prior to the commencement of classes, wave seven could not be included in the study.

The first wave was accepted in early June; the sixth wave in late August. Unfortunately, for the final two waves, there was insufficient time before classes started in September to complete the usual sequence of mailing a first questionnaire, a reminder card, a second questionnaire, and a second reminder card in order to maximize response rates. As a result, the overall response rate of 46% (the response rate was as high as 63% in early waves) was lower than a parallel study of entering traditional Arts students in which a response rate of approximately 70% was achieved. Had more time been available for the final waves it is likely that the response rate could have been increased substantially. (Questionnaires continued to come in after the beginning of classes but they were not included in this analysis.) Nonetheless, the response rate is relatively high compared to that of many other surveys focusing on adult students.

Determination of Desired Outcomes

Table 1 presents questions used to determine potentially desired outcomes of the university experience and the distribution of students' responses. Possible answers ranged from 1 (not at all important) to 5 (very important). Totals are less than 1,091 because respondents had the option of not answering questions not applicable to them.

Some questions included in the table have been used in other analyses focusing on the participation of adult students in educational activities (see, for example, Morstain and Smart, 1974; Carp, Peterson, and Roelfs, 1974); others were chosen because they were felt to be consistent with the current realities faced by potential Atkinson students. Taken collectively the questions cover a wide range of potential university outcomes.

As a first analytical step, factor analysis was carried out to determine the potential existence of underlying factors that might structure responses to questions listed in Table 1.[1] The analysis resulted in the identification of six factors that accounted for 47% of the total variance. The individual items comprising the factors and factor loadings are outlined in Table 2.

For readers unfamiliar with factor analysis the table should be interpreted in the following way. Factors, listed across the top of the table, represent dimensions underlying answers to groups of questions as listed to the left in the table. The factors with large loadings (for example .65) can be viewed as being closely related to the variable.

The first factor identified, 'knowledge acquisition', is tapped by the first two questions; the factor, 'career advancement' by the following four questions, and so on. The names given to the factors derive from the nature of the questions that are considered to reveal the factor. For example, as the first two questions deal with intellectual development and becoming better informed, the underlying factor was given the name 'knowledge acquisition'. The same logic applies to the other factors identified in the table: 'career advancement', 'civic improvement', 'improve family relations', 'social involvement', and 'family approval'. In the current analysis these factors, as identified by underlying questions, can be viewed as desired outcomes for Atkinson students.

There are a number of ways in which factor analysis can be used. In this article the answers to questions used in the identification of factors will be averaged to give an overall measure of the factor. By way of illustration, individuals scores on the first two questions will be averaged to give an overall measure of knowledge acquisition. (It might be noted that knowledge acquisition, career advancement, and social involvement, are comparable to Houle's learning orientation, goal orientation, and activity orientation respectively.) The alpha reliability coefficient for each scale so constructed is listed across the bottom of the table.

The mean scores for each scale are summarized in Table 3. The information in the table clearly indicates that knowledge acquisition and career advancement, with respective mean scores of 4.15 and 4.01 (1 means not important; 5 means very important), are the most desired outcomes for students admitted to Atkinson College. The mean scores for civic improvement, improve family relations, social involvement, and family approval are 2.96, 2.28, 1.98, and 1.61 respectively. From these figures we can conclude that civic improvement and improving family

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[1] Oblique rotation resulted in the identification of the most meaningful factors. Only factor items with a loading of .40 or higher were retained.

Table 2: Questions, Factors, and Factor Loadings

	Knowledge Acquisition	Career Advancement	Civic Improvement	Improve Family Relations	Social Involvement	Family Approval
For intellectual development.	.65					
To become better informed.	.65					
To give myself the credentials...new occupation...		.81				
To give myself the credentials...moving out present occupation...new occupation.		.62				
To prepare for a professional program.		.53				
To increase chances of finding a well-paying job.		.48				
To understand community problems better.			.58			
To become a better citizen.			.54			
To become a better spouse.				.86		
To become a better parent.				.84		
To feel a sense of belonging.					.83	
To meet new people.					.65	
For the social life.					.59	
To get away from routine personal problems.					.59	
Because it is important to my spouse.						.81
Because it is important to my parents.						.53
Alpha	.64	.69	.80	.89	.78	.71

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Table 3: Desired Outcomes from Attending College

	Mean	Std Deviation	Minimum	Maximum
Knowledge Acquisition...	4.15	.85	1.00	5.00
Career Advancement.....	4.01	.92	1.00	5.00
Civic Improvement.....	2.96	1.27	1.00	5.00
Improve Family Relns....	2.28	1.39	1.00	5.00
Social Involvement.....	1.98	.88	1.00	5.00
Family Approval.....	1.61	.92	1.00	5.00

relations are outcomes of average importance to admitted Atkinson students; social involvement and family approval are outcomes of low importance. This observation notwithstanding, it may very well be that different outcomes are important to different groups of students. This possibility will now be examined.

Group Differences in Desired Outcomes

The demographic characteristics of Atkinson students admitted for the Fall of 1993 are summarized in Table 4. The data indicate that the majority of admitted students are in the 25 to 44 age range, female, have had prior exposure to post-secondary education, and have family incomes in excess of $50,000 per annum. In addition, approximately one half report their marital status as 'single' and only approximately one quarter have children at home. While the majority were born in Canada, a sizeable minority were born elsewhere and many define themselves as members of visible minority groups. Among visible minorities, the largest single group define themselves as 'Black' or 'Negro'.

The data in Table 5 are scores for different groups of students for each of the expected outcome scores described in the previous section. (The approximate number of cases for each score can be determined from Table 4.) As determined by analyses of variance, differences that are statistically significant at the .05 level or better are marked with an asterisk. Because of space constraints, only differences that are statistically significant will be discussed.

Age

The data indicate that differences in the importance of knowledge acquisition and career advancement vary by age. With regard to the former, the higher the age, the greater the importance of knowledge acquisition as an outcome. By way of comparison, the over 45 group place less importance on career advancement as an outcome than the two younger groups[2]. This pattern may result from the fact that those over 45 are established in their jobs and, as a result, are more interested in knowledge for its own sake than individuals who still might be striving to secure themselves in their positions. While age-based differences also exist for the other scores, they are not statistically significant.

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[2] Some readers may have preferred smaller age categories. Those chosen were intended to correspond roughly to three life phases: pre-family and the period of acquiring credentials for a job; family formation and initial establishment in a job; mature family and job consolidation.

Table 4: Characteristics of Entering Students

	Count	Col %
Age		
Up to 24	280	26.0%
25 - 44	706	65.6%
45+	90	8.4%
Group Total	1076	100.0%
Gender		
Female	735	67.6%
Male	353	32.4%
Group Total	1088	100.0%
Education		
LT Secondary	20	1.8%
Secondary	96	8.9%
Trade/Apprentice	22	2.0%
Some College	86	7.9%
College	259	23.9%
Some University	169	15.6%
University	399	36.8%
Other	33	3.0%
Group Total	1084	100.0%
Family Income Estimate		
< 26,000	125	13.9%
26-49,999	310	34.4%
50-74,999	243	27.0%
75-99,999	135	15.0%
100-124,999	54	6.0%
125-149,999	19	2.1%
150,000+	14	1.6%
Group Total	900	100.0%
Marital Status		
Single	535	49.4%
Married	459	42.4%
Divorced	89	8.2%
Group Total	1082	100.0%
Children at Home		
Yes	287	27.5%
No	757	72.5%
Group Total	1044	100.0%
Length Time Canada		
5 Yrs or Fewer	135	12.6%
6 - 11	84	7.8%
12 - 21	110	10.2%
22+	102	9.5%
Born Here	644	59.9%
Group Total	1075	100.0%
Visible Minority Status		
East Indian	44	4.4%
Chinese	43	4.3%
Black/Negro	69	7.0%
West Indian	11	1.1%
Other Minority	58	5.9%
Non-Minority	764	77.2%
Group Total	989	100.0%

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Table 5: Importance of Desired Outcomes of University Experience by Characteristics of New Students

	Knowledge Acquisition	Career Advancement	Civic Improvement	Improve Family Relns	Social Involvement	Family Approval
	Mean	Mean	Mean	Mean	Mean	Mean
Age						
Up to 24	4.07*	4.05*	2.92	2.14	2.08	1.66
25 - 44	4.15	4.07	2.94	2.31	1.93	1.62
45+	4.46	3.28	3.21	2.30	1.97	1.26
Gender						
Female	4.29*	4.06	3.12*	2.36	1.95	1.59
Male	3.87	3.92	2.61	2.12	2.03	1.64
Education						
LT Secondary	4.56*	3.90	3.18	2.61*	1.82	1.56
Secondary	4.29	3.84	2.93	2.46	2.08	1.59
Trade/Apprentice	4.29	3.95	3.45	3.08	1.90	1.33
Some College	4.44	4.10	3.26	3.02	2.34	1.85
College	4.01	3.97	2.97	2.35	1.86	1.60
Some University	4.18	3.93	2.91	2.43	1.93	1.72
University	4.07	4.11	2.86	1.87	1.94	1.62
Other	4.15	3.62	2.61	1.94	1.96	1.75
Family Income Estimate						
< 25,000	4.15	4.31*	3.10	2.40	2.28*	1.80*
25-49,999	4.17	4.00	2.94	2.24	1.97	1.57
50-74,999	4.10	4.02	2.83	2.05	1.86	1.69
75-99,999	4.06	3.90	2.97	2.00	1.85	1.37
100-124,999	4.18	3.89	2.82	2.35	1.87	1.46
125-149,999	4.09	3.97	3.04	2.71	2.08	1.73
150,000+	4.14	3.80	3.11	2.50	2.00	1.43
Marital Status						
Single	4.07*	4.10	2.91	1.86*	2.09*	1.47*
Married	4.16	3.80	3.02	2.47	1.83	1.70
Divorced	4.41	4.11	3.22	2.29	2.04	1.40
Children at Home						
Yes	4.26*	3.89*	3.15*	2.71*	1.93	1.60
No	4.11	4.08	2.86	1.94	1.99	1.60
Length Time Canada						
5 Yrs or Fewer	4.30	4.26*	3.24*	2.67*	2.45*	2.14
6 - 11	4.35	4.19	3.01	3.06	2.34	1.93
12 - 21	4.16	4.42	2.68	2.19	1.93	1.89
22+	4.43	3.84	3.05	2.45	1.87	1.83
Born Here	4.13	3.92	2.85	1.98	1.90	1.41
Visible Minority Status						
East Indian	3.85*	4.15*	3.00	2.53*	2.36*	1.88*
Chinese	4.21	4.18	2.92	2.79	2.05	1.68
Black/Negro	4.35	4.37	3.06	2.37	2.02	1.98
West Indian	4.19	4.06	3.10	2.40	2.00	2.05
Other Minority	3.98	4.08	2.90	2.50	2.19	2.34
Non-Minority	4.16	3.92	2.90	2.15	1.91	1.46

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Gender

Differences based on gender exist for knowledge acquisition and civic improvement. In both cases, males attach less importance to the potential outcome than females.

Education

Differences based on education are less straight forward than for either age or gender. If knowledge acquisition is examined it is clear that individuals with the lowest education, less than secondary, believe that knowledge acquisition is more important than any other educational group. At the other end of the scale, those with a completed university degree are the least concerned with knowledge acquisition as an outcome. For the other categories, however, the pattern is not consistent.

Although differences are statistically significant, the pattern with regard to improvement in family relations is equally difficult to interpret. With a score of 1.87 university degree holders are the least concerned with this outcome. The most concerned, with scores of 3.08 and 3.02 are those with trade/apprentice and some college backgrounds.

Family Income

If family income is examined, it can be seen that differences are statistically significant for career advancement, social involvement, and family approval. For the first mentioned, it is fair to say that the lower the income the more important career advancement as an outcome. For example, the score for those with family incomes below $26,000 is 4.31; for individuals with a family income of $150,000+ the score is 3.60.

With a score of 2.29 it is clear that those with incomes less than $26,000 see social involvement as a more important outcome than other income groups. The relationship, however, is not linear. The group least concerned with social involvement is the one with an income between $75,999 and $99,999. For incomes in excess of this amount, the importance of social involvement increases once more.

The pattern for family approval is even more irregular. While the most importance to gaining family approval is given by those with the lowest incomes, there is no discernable pattern for other income groups.

Marital Status

When marital status is examined statistically significant differences are clear for knowledge acquisition, improvement in family relations, social involvement, and family approval. To begin, single students are the least interested in knowledge acquisition as an outcome; the divorced the most. The married fall between these groups. It may be that some of the divorced are attempting in part to deal with a marital transition by gaining new knowledge (the relationship between life transitions and adult education is analyzed by Courtney, 1992). The single may be the least interested in knowledge acquisition because of other priorities. Overall differences, however, are slight.

If improving family relations is examined, it is obvious that the married are most concerned with this outcome (remember that this scale included questions relating to becoming a better parent and spouse). By way of comparison, the single are, understandably, least concerned. The divorced, who may still have commitments to children, fall in between.

The pattern for social involvement is equally explicable by marital status. The married are the least interested in this outcome (family responsibilities may take up a great deal of time). The single are the most interested (they likely have the greatest amount of free time). Once again, the divorced fall in the middle.

Finally, the divorced and single students see family approval a less important outcome than the married.

Years in Canada

For career advancement, the figures in the table indicate a direct relationship with years in Canada. With a score of 4.26, individuals in Canada five or fewer years place the most importance on career advancement as a desired outcome. Conversely, those who were born in Canada place least importance on this outcome - their score is only 3.92. The scores for individuals in the other categories fall between these extremes.

Individuals who have been in Canada five or fewer years or between six and 11 years place the most emphasis on civic improvement as an outcome. Such an objective for new Canadians is understandable. Less comprehensible is that students who have been here 22 or more years place less emphasis on civic improvement than the Canadian born.

The same general pattern holds for improving family relations. The two groups who have been in the country the shortest amount of time place most

emphasis on this outcome. Least importance is given by those born in Canada while those here 22 years or more place an intermediate amount of importance on improving family relations.

If social involvement is examined it can be seen that the greater the years in Canada, the less important the outcome of social involvement. By way of illustration, the score for those who have been in the country five or fewer years is 2.45; for those here 22+ years, 1.87. For the recently arrived it may be that opportunities for social involvement are more restricted than for others, and, as a result, they view educational participation as a way of broadening social horizons.

A similar relationship is evident for gaining family approval. This outcome is most important for the recently arrived and least important for the Canadian born. This relationship may reflect the traditional nature of some newly arrived families as much as anything else.

Visible Minority Status

In the survey, respondents were asked if they considered themselves to be members of visible minority groups. If they responded in the affirmative, they were asked to which group they belonged. The categories 'East Indian', 'Chinese', 'Black/Negro', and 'West Indian' *were supplied by the respondents themselves* rather than being selected from pre-assigned options. All other visible minority designations were combined in the 'Other Minority' group.

Individuals defining themselves as Black/Negro place more emphasis on the goal of knowledge acquisition than other visible minority groups or non-visible minorities (Whites). Least importance is given to this outcome by the Other Minority group.

When career advancement is looked at, it seems as though West Indians are the most concerned with this outcome; Whites the least concerned. (It should be noted, however, that very few students defined themselves as West Indian.) Whites are also the least concerned with an improvement in family relations as a desired outcome. By way of contrast, Other Minorities are the most concerned with this issue. Whites are again the least concerned with social involvement and gaining family approval. The most concerned with these two outcomes are East Indians and Other Minorities respectively.

Implications

What do these somewhat disparate findings suggest? Before answering this question it must be noted that even though many relationships are statistically significant, differences in scores are not large. This said, it is nonetheless evident that students with different characteristics are not all looking for the same outcomes of the university experience with equal intensity. Having established this much, it is now possible to examine the degree to which various characteristics affect the perceived importance of the outcomes under consideration. In carrying out this analysis, particular attention will be given to the importance of gender and visible minority group status.

The Impact of Group Characteristics

The impact of group characteristics on the importance of the various outcomes was determined using regression analysis. The variables used have already been identified in Table 4. The only change made for the regression analysis was that education was collapsed into: secondary school or less; some college/university; and completed college/university. For purposes of the regression the reference categories were as follows: 'up to 24' for age; 'female' for gender; 'less than secondary' school for education; 'less than $26,000' for family income; 'single' for marital status; 'no' for children at home; 'born here' for years in Canada; and 'non-minority' for visible minority status. For readers unfamiliar with dummy regression the implication of reference categories should become evident when the results of the analysis are presented.

Stepwise regression with pairwise deletion was used to determine the impact of each of the dummy variables on the scores for the desired outcomes (listwise deletion yielded similar results). First, all variables with the exception of gender and visible minority statuses were entered as a block. Gender and visible minority statuses were entered second. This procedure enabled a conservative determination of the impact of gender and visible minority status after the effects of other variables had been considered.

Knowledge Acquisition

The results of the regression analysis for knowledge acquisition are summarized in Table 6. From table data it seems that individuals in the 25 to 44 age category are more concerned with knowledge acquisition than students 24 and younger (the reference category). In addition, those having a college/university degree (compared to the reference category of survey respondents with less than

Table 6: Regression Analyses for Various Outcomes

	Cumulative Variance	b	Beta
Knowledge Acquisition			
Age 25 - 44	1.1%	.10	.09
College/University Education	1.8%	.06	-.09
Male	7.1%	.06	-.22
Black	7.7%	.11	.07
Other Minority	8.1%	.12	-.07
Degrees of Freedom Regression = 5 Residual = 824			
Career Advancement			
Age 25 - 44	4.8%	-.71	-.22
Here 5 Yrs or Fewer	5.6%	.24	.09
Black	6.8%	.39	.11
Male	7.5%	-.17	-.09
Degrees of Freedom Regression = 4 Residual = 591			
Civic Improvement			
Children at Home	1.1%	.25	.09
Here 5 Yrs or Fewer	1.9%	.40	.11
Male	5.5%	-.82	-.19
Degrees of Freedom Regression = 3 Residual = 764			

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	Cumulative Variance	b	Beta
Improve Family Relns			
Children at Home	7.6%	.73	.24
Here 5 Yrs or Fewer	10.8%	.81	.19
Here 6 - 11 Yrs	13.6%	.84	.16
College/University Education	16.3%	-.49	-.17
Other Minority	17.3%	.68	.12
Male	18.4%	-.31	-.11
Degrees of Freedom Regression = 6 Residual = 429			
Social Involvement			
Here 5 Yrs or Fewer	3.3%	.53	.20
Married	5.5%	-.27	-.15
Here 6 - 11 Yrs	7.1%	.41	.13
Degrees of Freedom Regression = 3 Residual = 648			
Family Approval			
Here 5 Yrs or Fewer	4.9%	.57	.20
Here 12 - 21 Yrs	7.0%	.35	.11
Here 6 - 11 Yrs	8.8%	.29	.08
Married	10.5%	.30	.16
Age 25 - 44	11.5%	-.35	-.11
Some College/University Education	12.4%	.20	.09
Income $75,000 - $99,999	13.2%	-.25	-.10
Other Minority	14.3%	.57	.15
Black	15.8	.36	.10
Degrees of Freedom Regression = 9 Residual = 446			

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secondary education) place less emphasis (as seen from the negative sign for beta) on knowledge acquisition. The variance explained by these two variables, however, is only 1.8%.

More important is that males less than females (indicated by the negative sign for beta) believe that knowledge acquisition is a desired outcome . Moreover, the male variable increases the total explained variance to 7.1%. When being Black and being an 'other' visible minority group member are brought into the equation there is an additional, but marginal, increase in the variance explained, for a total of 8.1%. It is evident that for Blacks knowledge acquisition is slightly more important than for the reference category (non-minorities) and for other minorities knowledge acquisition is less important than for non-minorities (the reference category).

More variables than those discussed here were included in the regression analysis; however, as they had no significant effects on knowledge acquisition they need not be discussed. In subsequent analyses reference also will only be made to variables with a significant effect on the outcome under consideration.

Career Advancement

The information presented in Table 6 indicates that those in the 25 to 44 age group attach less importance (beta is negative) to career advancement than those in the younger reference category. In addition, this variable explains 4.7% of the variance in career advancement. Table data also indicate that recent immigrants (i.e., having been in Canada up to five years) place more emphasis on career advancement than those born here, the reference category. The inclusion of this variable, however, increases the explained variance to only 5.6%.

With regard to visible minority status and gender it can be seen from the associated betas that blacks place more importance on career advancement than non-minorities (the reference category) and males place less importance than females on the same outcome. At the same time increases to the total explained variance with the inclusion of these variables are slight - from 5.6% to 7.5%.

Civic Improvement

Not surprisingly, the information in Table 6 shows that individuals with children living at home (compared to those with no children at home) and individuals who have been in the country up to five years (compared to those born here) are concerned with civic improvement as a desired outcome; however, the total variance explained by these two variables is only 1.9%. The table also

demonstrates that males place less emphasis on civic improvement than females and the inclusion of the variable male increases total variance to 5.5%. In contrast to previous analyses, visible minority statuses have no impact on civic improvement as a desired outcome.

Improve Family Relations

As was the case when civic improvement was examined, students with children at home attach more importance to improving family relations as a desired outcome of the university experience than those with no children. Indeed, as is evident from Table 6, this variable alone explains 7.6% of the total variance. Improvements in family relations are also felt to be important by individuals who have been in the country up to and including five years and from six to 11 years. The addition of these two variables raises explained variance to 10.7% and 13.6%. By way of comparison, those with college/university degrees are less likely than those with less than a secondary education (the reference category) to emphasize family relations. The inclusion of this variable raises explained variance to 16.3%. While the concern of those with children with improvement in family relations as a desired outcome is easy to understand, the relation between this outcome and other variables is more difficult to untangle.

The inclusion of visible minority statuses and the male variable also has implications for the outcome under consideration. Other minorities more than non-minorities, and males less than females, put emphasis on improvements in family relations. The addition of these two variables, however, raises explained variance from 16.3% to only 18.4%.

Social Involvement

From Table 6 it can be seen that students who have been in Canada five or fewer years as compared to the Canadian born, the single rather than the married (beta for married is negative), and students who have been in the country six to 11 years in comparison to those who have been born here, view social involvement as a desirable outcome. It is understandable that individuals in these groups might be more concerned with extending their social contacts than those in the reference categories. The total variance explained by the three variables, however, is only 7.1%.

Family Acceptance

As can be seen from the data in Table 6 a number of variables are

important to an understanding of family acceptance as a desired outcome; however, it is difficult to find a common thread among them.

Individuals who have been in Canada five or fewer years, twelve to twenty years, or from six to 11 years are more concerned with family acceptance than the native born. Collectively these variables explain 8.9% of the variance. In addition, the married more than the single are concerned with family acceptance - a more understandable (and perhaps self-evident) finding. The inclusion of this variable raises the explained variance to 10.5%.

Further inclusions show that those with ages up to 24 (the reference group) compared to the 25 to 44 group (for whom beta is negative), individuals with some college as compared to those with less than secondary school education, and students with family incomes between $75,000 and $99,999 in comparison to those with less than $26,000, also are more inclined to value family acceptance as an outcome. The addition of these final three variables raises total explained variance to 15.7%.

A Summary Measure

Each of the preceding analyses has examined the degree to which students with different characteristics feel that various outcomes of the university experience are desirable. In order to obtain a feel for the overall picture produced by the analyses, in Table 7, information is presented on the variables that contribute, either positively or negatively, to the outcomes under consideration. A positive relationship is one in which individuals in the category under consideration - e.g., some college/university - place more importance on the outcome - e.g., family acceptance - than the reference category. A negative relationship is one in which individuals in the category being discussed - e.g., male - feel that a desired outcome - e.g., knowledge acquisition - is less important than those in the reference category.

Before beginning, however, it is important to note that in no analysis was the total amount of variance explained particularly high. At best, the variance explained by included variables was 18.4% for improving family relations; at worst, 5.5% for civic improvement. Results such as these indicate that while differences may exist between and/or among students with various characteristics, differences should not be exaggerated.

Table 7. Summary

	Knowledge Acquis.	Career Advancement	Civic Improvement	Improve Family Relns	Social Involvement	Family Approval
Age 25 - 44	+	-				
Some Col/Univ						+
Col/Univ	-			-		
Income $75,000 - $99,999						-
Married					-	+
Children at Home			+	+		
Here 5 Yrs or Fewer		+	+	+	+	+
Here 6 - 11 Yrs				+	+	+
Here 12 - 21 Yrs						+
Male	-	-	-	-		
Black	+	+				+
Other Minority	-					+
Explained Variance	8.1%	7.5%	5.5%	18.4%	7.0%	15.8%

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This caveat aside, there are a number of patterns suggested by the summary table. First, and perhaps most obvious, is the fact that a number of outcomes, with the exception of knowledge acquisition, may be more important for new immigrants than for students born in Canada. This conclusion is suggested by the impact that variables focusing on length of time in the country had on career advancement, civic improvement, improving family relations, social involvement, and family approval. Second, career advancement is more important to the young than to those aged 25-44; conversely, knowledge acquisition is more important to the latter than to the former. Also, and perhaps understandably, knowledge acquisition is less important to those who already have a post-secondary degree than to individuals who have not completed secondary school. Equally easy to understand is that the married are less concerned with social involvement and more interested in family acceptance than the single. Similarly, those with children place more importance on civic improvement and improving family relations than individuals without children living at home.

When it comes to the main concerns of this article, the impacts of gender and visible minority statuses, it is clear that males attach less importance to knowledge acquisition, career advancement, civic improvement, and improving family relations, than females. Similarly, Blacks feel that knowledge acquisition, career advancement, and family acceptance are more desired outcomes than do non-visible minorities. Likewise, other minorities place more emphasis than non-minorities on family acceptance; however, when knowledge acquisition is examined, it is evident that non-minorities are more concerned with this outcome than other minorities. These differences aside, it must be noted that the increase in variance explained by gender and visible minority statuses is high for none of the outcomes under consideration. The same is true for other variables in the analyses.

Conclusion

The foregoing analysis has shown that adult students entering Atkinson College in the Fall of 1993 have a number of desired outcomes of the university experience on their minds. In descending order they are: knowledge acquisition, career advancement, civic improvement, improving family relations, social involvement, and family acceptance. Indeed, given their low scores of overall importance, it is doubtful that social involvement and gaining family approval should be seen as desired outcomes. (It might be remembered that social involvement was one of Houle's main reasons for adults participating in education - a conclusion reached by other researchers as well.) The analysis has also demonstrated that while differences are not always large, the importance of many outcomes varies by student characteristics such as length of time in the country,

marital status, having children in the home, gender, and visible minority group status.

The implication of these findings is that from the student point of view the success of the university experience may be measured in terms of the realization of desired outcomes that may include, but likely go beyond, getting good marks. It must be recognized, however, that the university has varying amounts of control over various outcomes. For example, it may be able to provide a curriculum and learning environment conducive to knowledge acquisition. Whether or not knowledge acquisition as dealt with here will lead to career advancement is a different matter. The exact nature of the knowledge, labour market conditions, and so on, must also be taken into consideration. Similarly, whether or not knowledge gained through the university experience will translate into civic improvement or will result in improved family relations and/or family approval, is not up to the university. Where the university may be able to play a more direct role is in providing opportunities for students concerned with social involvement.

In short, the university may be able to make available to adult students classroom and other experiences that provide the means whereby knowledge acquisition and/or social involvement can be enhanced. If the university provides a curriculum that is deemed essential to employers it may also contribute to career advancement. Whether or not the university experience results in civic improvement, improved family relations, or family approval is up to the students, the community, and the family.

Bearing in mind the foregoing, from a policy point of view the challenge to both faculty and staff becomes one of providing students as much as possible with a university experience conducive to the realization of their desired outcomes. Whether or not existing practices at Atkinson College are as consistent with this objective as they could be will be determined in future studies.

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